A new species of *Paleoendeitoma* Deng, Ślipiński, Ren & Pang, 2017 (Coleoptera: Zopheridae: Colydiinae) from Upper Cretaceous Burmese amber

liří HÁVA^{1,2}

¹Daugavpils University, Institute of Life Sciences and Technology,
Department of Biosystematics, Vienības Str. 13, Daugavpils, LV - 5401, Latvia

²Private Entomological Laboratory and Collection,
Rýznerova 37, CZ - 252 62 Únětice u Prahy, Praha-západ, Czech Republic

e-mail: jh.dermestidae@volny.cz

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Abstract. The species *Paleoendeitoma buryi* sp. nov. from Upper Cretaceous Burmese amber is described, illustrated and compared with similar taxa.

INTRODUCTION

Zopheridae is a moderately large family within the superfamily Tenebrionoidea, divided into two subfamilies: Colydiinae and Zopherinae (Ślipiński & Lawrence 1999, 2010, lvie et al. 2016, Deng et al. 2017).

Fossil zopherids are rare (Alekseev & Bukejs 2016). In recent years, several taxa have been described from the Eocene Baltic amber (Alekseev & Lord 2014; Alekseev 2015; Alekseev & Bukejs 2016; Bukejs et al. 2019) and from the Upper Cretaceous Burmese amber (Deng et al. 2017, Ross 2019). In the present paper, a new species of *Paleoendeitoma* Deng, Ślipiński, Ren & Pang, 2017 from the Burmese amber is described. It is the fourth known zopherid species from this fossil resin (see check-list below).

MATERIAL AND METHODS

The material examined is deposited in the collection of Jiří Háva, Private Entomological Laboratory & Collection, Únětice u Prahy, Prague-West, Czech Republic [JHAC].

The size of the beetles or of their body parts can be useful in the species recognition and thus, the following measurements were made:

total length (TL) - linear distance from anterior margin of head to apex of elytra; elytral width (EW) - maximum linear transverse distance.

The specimen of the presently described species is provided with red, printed label with texts as follows: "HOLOTYPE *Paleoendeitoma buryi* sp. nov. J. Háva det. 2019".

TAXONOMY

Family Zopheridae Solier, 1834
Subfamily Colydiinae Erichson, 1842
Tribe Synchitini Erichson, 1845
Genus *Paleoendeitoma* Deng, Ślipiński, Ren & Pang, 2017

Paleoendeitoma buryi sp. nov.

(Figs. 1-5)

Type material. Holotype, sex unknown; Burmese amber inclusion: Hukawng Valley, northern Myanmar; earliest Cenomanian; deposited in JHAC.

Description. Measurements: TL 6.8 mm, EW 2.2 mm. Body slightly convex, elongate, parallel-sided (Fig. 1); unicolorously brown; uniformly granulate dorsally and ventrally; moderately densely covered with homogeneous, recumbent setae.

Head prognathous, subquadrate, widest at eyes. Frontal area moderately convex, tuberculate and setose. Frontoclypeus transverse, slightly dilated anteriorly, with slightly convex anterior margin, raised above antennal insertions. Eyes large, moderately protruding, subhemispherical, coarsely faceted, about eight ommatidia across, apparently with interfacetal setae. Antenna short, reaching nearly posterior one-third of pronotum, 11-segmented with loose 3-segmented club (Figs. 2, 4a); antennomeres 1-8 cylindrical; scape widest, partially concealed by frontal projection; pedicel narrower, about 0.6 times as wide as scape; antennomere 3 slightly longer (about 1.2 times) than antennomere 4; antennomere 9 slightly dilated apically; antennomere 10 distinctly dilated apically; antennomere 11 oval, with acute apex. Antennal insertions dorsally concealed by frontal angulations. Antennal grooves at lower margin of eyes absent.

Pronotum transverse, about 1.3 times wider than long, widest medially, slightly narrowed anteriad and posteriad; with narrowly explanate sides; anterior margin almost straight medially (in dorsal view); posterior margin slightly sinuate; lateral margins slightly convex, moderately converging anteriorly and posteriorly, with small, dense denticles (Figs. 2, 4b), each denticle apparently bearing seta; anterior angles acute, strongly prominent; posterior angles nearly rectangular.

Scutellum small, apparently pentagonal. Elytra elongate, 2.0 times longer than wide, slightly convex, about 2.6 times as longer than pronotum, at humeri slightly wider than pronotal base; humeri well developed, with humeral angles almost rectangular; lateral margins crenulate and parallel-sided, jointly rounded apically; each elytron with apparent regular rows of small, circular punctures and setae (poorly visible in specimen examined), intervals flat, not carinate. Epipleura moderately wide, reaching to elytral apex, widest at humeral angle. Metaventrite with longitudinal carina (Fig. 5).

Fore legs moderately long and slender (poorly visible in specimen examined).

Note. The holotype specimen is damaged and lacking: labrum, palpi, right antenna, abdomen, middle and hind legs; pronotum and elytra partially missing discal parts.

Differential diagnosis. According to available morphological characters, the new species tentatively belongs to the extinct genus *Paleoendeitoma* and is similar to *P. antennata* Deng, Ślipiński, Ren & Pang, 2017 but differs from it in its antennal structure with antennomere 9 wider; shape of pronotum with anterior margin almost straight medially and posterior margin slightly sinuate; and humeri more angulate.

Paleoendeitoma buryi sp. nov. is distinguishable from *P. minuta* Deng, Ślipiński, Ren & Pang, 2017 in antennal structure with antennomere 9 wide, and antennomere 11 oval with acute apex and nearly as wide as antennomere 10; shape of pronotum with anterior margin almost straight medially, and anterior angles acute and strongly prominent; pronotum without small tubercles; densely crenulate lateral pronotal margins; and larger and less convex body.

Etymology. Patronymic, dedicated to Czech palaeontologist and colleague of the author Petr Bury (Karviná, Czech Republic).

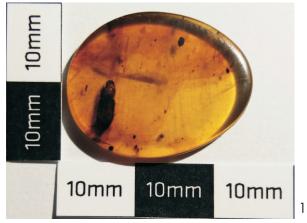
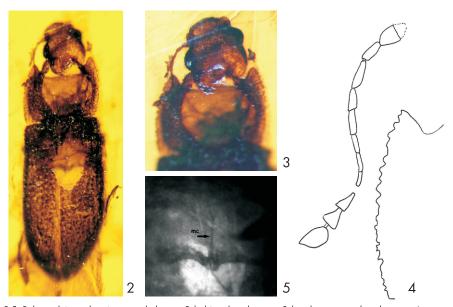


Fig. 1. Amber inclusion with Paleoendeitoma buryi sp. nov.



Figs. 2-5. *Paleoendeitoma buryi* sp. nov., holotype: 2-habitus dorsal aspect; 3-head, pronotum dorsal aspect; 4-antenna and left pronotal side, schematically; 5-metaventrite (mc-metaventrite carina).

LIST OF KNOWN ZOPHERIDAE FROM BURMESE AMBER

Cretomysteria burmanica Deng, Ślipiński, Ren & Pang, 2017 Cryphalites rugosissimus Cockerell, 1917 Paleoendeitoma antennata Deng, Ślipiński, Ren & Pang, 2017 Paleoendeitoma buryi sp. nov. Paleoendeitoma minuta Deng, Ślipiński, Ren & Pang, 2017 ACKNOWLEDGEMENTS. I am very grateful to Petr Bury (Karviná, Czech Republic) for providing me with the interesting amber inclusion, to Andris Bukejs (Latvia) for review of the manuscript and to Miloslav Rakovič (Czech Republic) for language corrections.

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